



Nitrogen Removal & Recovery from Vegetated Filter Strips

M. Robinson and S. Primard, USDA, NRCS, Big Flats PMC, Corning, NY and Cape May PMC, Cape May Court House, NJ

Increasing environmental awareness of farmers and public requires responsible removal of excess nitrogen before groundwater contamination occurs. We studied 11 grass species, at two locations, to evaluate their relative N-removal potential and to provide a ranking of the species tested to help guide recommendations for buffer strips and wastewater disposal areas. The management regimes were Harvested (H), from which biomass was cut and removed 3 times a year, and Clipped (C), which was cut once and biomass left on the plot, simulating use of CRP land as a filter. At both sites, the annualized average removal from Harvested plots was significantly higher than from the Clipped plots. At Big Flats, tall fescue removed significantly less than reed canarygrass, orchardgrass and sweet vernalgrass (both treatments), while at Cape May, reed canarygrass, orchardgrass, prairie brome grass, and tall fescue showed significantly greater removal than sweet vernalgrass, Kentucky bluegrass, switchgrass and perennial ryegrass for Harvested treatment by perennial ryegrass and orchardgrass switched places in ranking for the Clipped treatment.

1997 ASA Annual Meeting Abstract; Anaheim, CA; pg. 39. Oct. 26-31, 1997.

The United States Department of Agriculture (USDA) prohibits discrimination in all its programs on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD).

To file a complaint of discrimination, write the USDA, Director, Office of Civil Rights, Room 326W, Whitten Building, 14th and Independence Avenue, SW. Washington, D.C., 20250-9410 or call (202) 720-5964 (voice or TDD). USDA is an equal opportunity provider and employer.